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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------|----------------------|-------------------------|------------------|
| 09/780,566 | 09/780,566 02/12/2001 | | 01107.00092 | 1623 |
| 22907 7 | 590 04/09/2003 | | | |
| BANNER & WITCOFF 1001 G STREET N W SUITE 1100 | | | EXAMINER | |
| | | | YU, MISOOK | |
| WASHINGTON, DC 20001 | | | ART UNIT | PAPER NUMBER |
| | | | 1642 | 16 |
| | | | DATE MAILED: 04/09/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 1 | Application No. | Applicant(s) | | | |
|---|--|--|--|--|--|
| _ | 09/780,566 | VOGELSTEIN ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | MISOOK YU, Ph.D. | 1642 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 86(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| 1) Responsive to communication(s) filed on 21 J | <u>anuary 2003</u> . | | | | |
| 2a)⊠ This action is FINAL . 2b)□ Thi | is action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>25-32</u> is/are pending in the applicatio | n. | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>25-32</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accep | oted or b) objected to by the Exa | miner. | | | |
| Applicant may not request that any objection to the | e drawing(s) be held in abeyance. S | ee 37 CFR 1.85(a). | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1. Certified copies of the priority document | s have been received. | | | | |
| 2. Certified copies of the priority document | s have been received in Applicat | ion No | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | | | | | |
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DETAILED ACTION

Claims 25-32 are pending and examined on merits.

Specification

Applicant's arguments that those skill in the art could have readily found the assay in the literature and that Li et al is not essential to the practice of the invention are not persuasive for reason of record. How to measure activity of CDK4 is essential to practice the instantly claimed invention and only teaching in the specification how to measure the activity is at page 9 lines 1 and 2, a reference to Li et al and the Office maintains this reference to a publication incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper.

Claim Rejections - 35 USC § 112

Claims 25-32 **remain rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 25 is confusing therefore indefinite because the active steps of the claim comprises: 1) contacting a c-myc over-expressing cell with an anti-tumor candidate agent; 2) measuring CDK4 kinase activity if the agent inhibits that activity. The specification does not teach any method directly measuring the CDK4 kinase activity. Li et al (cited above) does not teach how to measure the activity inside cells. Method of Li et al uses purified CDK4-cyclin D2 holoenzyme and all of the reference applicant provided with the amendment filed on 1-21-2002 also uses the purified protein. Therefore it is not clear how the activity is measured. Applicant does not address the issue the Office raised that there is no nexus connecting the step of contacting the cells with useful agents to the step of measuring CDK kinase activity, therefore the claims are still indefinate. This rejection affects the dependent claims.

Claims 25-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to **enable**

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one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant argues with the attached Exhibit A-G that measuring CDK4 kinase activity is well known in the art. However, none of the reference in Exhibit A-G teaches how to measure CDK4 kinase activity after contacting cell with useful agents in the screening process. The references do not connect dots between adding useful agent to cells and measuring CDK4 kinase activity such that one in skilled in the art would have difficulty figuring out which agent affects the kinase activity.

Claim Rejections - 35 USC § 102

Rejection of claims under 35 U.S.C. 102(a) as being anticipated by Kubo et al (December 1999, Clinical Cancer Research 5, 4279-4286) **is withdrawn** because applicant argument that the reference does not teach method step involving measuring CDK4 kinase activity directly during the screening process, is persuasive.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 703-308-2454. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony C Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Misook Yu April 7, 2003

